

REMARKS

Favorable reconsideration of the amended claims and the newly added claims is respectfully requested in view of the above amendments and following remarks.

Claims 16, 21, and 22 have been canceled and Claims 1-13 were previously canceled. Claim 14 has been amended to recite a crop protection composition comprising the active compounds (biscarbamate, silicic acid, and ethoxylated tridecanol having 5 to 13 ethoxy units) elected in Applicants' Response to Election Requirement, dated September 8, 2003. Claim 17 has been amended to depend from Claim 14 and to recite a silicic acid selected from the group consisting of: colloidal silicic acid (silica gel) and pyrogenic silicic acid (Aerosil). Claim 19 has been amended to depend from Claim 17. Claim 20 has been amended to recite that the proportion of the at least one surfactant is in the range of 5 to 40 % by weight. Claim 23 has been amended to recite a biscarbamate selected from the group comprising consisting of: phenmedipham, desmedipham, and mixtures thereof. Claim 26 has been amended to depend from Claim 24 and to recite a wetting agent and dispersant selected from the group consisting of: ethoxylated tristyrenephenol phosphates, sodium lignin sulphonates, potassium lignin sulphonates, calcium lignin sulphonates, magnesium lignin sulphonates, zinc lignin sulphonates, ammonium lignin sulphonates, and mixtures of these agents. Claim 29 has been amended to depend from Claim 24 and to recite a crop protection composition wherein the active compounds and auxiliaries are finely ground and adjusted to a degree of fineness from 0.5 to 20 μm . Claim 31 has been amended to depend from Claim 24 and to recite a process for preparing a crop protection composition wherein the active compounds and auxiliaries are finely ground and adjusted to a degree of fineness from 0.5 to 20 μm . Newly added Claim 33, dependent on Claim 14, recites that the crop protection composition is formulated as a suspension concentrate. Newly added Claim 34, dependent on Claim 14, recites compositions comprising the compounds removed from Claim 23 (metamiltion and ethofumesate). Claims 24-25, 27-28, 30, and 32 have been amended to conform the claim language to U.S. patent practice.

Claims 14-15, 17-20, and 23-34 are now pending in the application, with Claim 14 being in independent format. It is urged that support for all the above amendments may be found throughout the specification as originally filed and that none of the amendments constitute new matter or raise new issues for consideration.

Claim Rejection – 35 U.S.C. §112, first paragraph

The Examiner has rejected Claim 14 under 35 U.S.C. §112, first paragraph as lacking an enabling disclosure. Specifically, the Examiner stated that the specification does not reasonably provide enablement for urea derivatives.

In response to this rejection, pending Claim 14 has been amended to exclude urea derivatives. Applicants submit that one of skill in the art, when presented with the present specification, would be able to make and use the claimed compositions and that this rejection under 35 U.S.C. §112, first paragraph, may thus be properly withdrawn.

Claim Rejection – 35 U.S.C. §112, second paragraph

The Examiner has rejected Claim 14 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Specifically, the Examiner stated that the term "derivatives" of urea derivatives was not properly defined.

As noted above, Claim 14 has been amended to exclude urea "derivatives". Applicants respectfully submit that one of skilled in the art would clearly be able to determine the metes and bounds of the amended claims and that this claim rejection under 35 U.S.C. §112, second paragraph, may be properly withdrawn.

Claim Rejections – 35 U.S.C. §103(a)

Claims 14-19, and 23-32 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Wieschollet et al.* (GB 2 245 494; 1/8/92). This rejection is respectfully traversed, particularly in view of the following remarks.

The teachings by *Wieschollet et al.* are restricted to **solid formulations** (granules, powders). In contrast, Applicants' invention teaches **suspension** concentrates. Suspension concentrates, like non-concentrated suspensions, are **liquid** systems. Water-dispersible granules or powders and suspension concentrates are fundamentally different types of formulations used in the field of herbicidal compounds.

Wieschollet et al. teaches ground synthetic or natural minerals which may be used as carriers for formulating water-dispersible granules or powders. *Wieschollet et al.* also teaches a

combination of three different types of herbicides, namely, metamiltron, ethofumesate, phenmedipham/desmedipham, which may only be formulated as water-dispersible granules or powders if certain types of dispersing agents and emulsifiers are added during the manufacturing stage. Since the Applicants' invention teaches suspension concentrates rather than water-dispersible granules or powders, it would not have been obvious to a person having ordinary skill in the art at the time of the invention to apply the teachings of *Wieschollet et al.* to suspension concentrates. In addition, since *Wieschollet et al.* only teaches solid formulations containing at least three different herbicidal compounds, a person having ordinary skill in the art, when formulating suspension concentrates that do not contain the particular combination of the active substances disclosed in *Wieschollet et al.*, would not have been motivated to add an inorganic adsorbent comprising a silicic acid and a surfactant comprising an ethoxylated tridecanol having 5 to 13 ethoxy units to a biscarbamate herbicide-containing suspension concentrate.

Next, *Wieschollet et al.* fails to teach the unexpected advantageous composition taught by Applicants' invention. Applicants' invention teaches plant protection agents having an enhanced and broader spectrum of activity than other plant protection agents known in the art. Support for this advantage can be found, for example, on page 2, first paragraph in the specification as filed. The more enhanced and broader spectrum of activity is achieved by the addition of a combination of adsorbents and surfactants to the suspension concentrate (see, in particular, Examples 3 and 4 of the specification). Also, herbicidal activity is shown to increase as increasing amounts of silica gel are added to the formulation (Table 2 on page 10 of specification). The improved biological effects provided by Applicant's invention may be summarized by the following:

- Enhanced activity of the formulations resulting from the addition of silica gel contents of 20, 30 and 40g/l (Example 1, Table 2 on page 10 of the specification);
- Enhanced activity of the desmedipham formulation, suspension concentrate C (Example 2 and Table 3 on pages 10 and 11);
- Example 3 (Table 4, pages 11 and 12) shows that the fresh weight of the treated weeds is reduced when using the suspension concentrate A of Applicants' invention when compared to formulations known in the art, as referenced by the lower application rates for POLPE, MATCH, MATIN and STEME;

- Example 4 (Table 5, pages 12-14) compares formulations of suspension concentrate A and suspension concentrate B of Applicants' invention to known the formulations EC Betanal, Betanal AM11, and EC Betanal AM. Results of application rates were compared, i.e. concentrations and volumes were taken into consideration (g/l x l/ha). The suspension concentrates according to Applicants' invention clearly showed higher herbicidal activity than the known formulations.

- Example 5 (Table 6, page 15) compares the formulations of Applicants' invention to known formulations containing additional ethofumesate. Applicants' suspension concentrates comprising silica gel showed more enhanced activity.

Since the above mentioned advantages were unexpected and were not taught by *Wieschollet et al.*, a person having ordinary skill in the art would not have been motivated to apply this prior art teaching to the formulation of the suspension concentrates of the Applicants' invention.

Furthermore, the teachings of *Wieschollet et al.* relate to solving a problem that occurs during the manufacturing of water-dispersible granules or powders containing certain combinations of herbicides. The suspension concentrates of Applicants' invention are manufactured by different methods, and are therefore unrelated to the manufacturing problems as disclosed in *Wieschollet et al.*

It is therefore urged that *Wieschollet et al.* would not render the presently claimed compositions obvious to one of skill in the art, and that the present rejection of the claims under 35 USC §103(a) may thus be properly withdrawn.

Claim Rejections – 35 U.S.C. §103(a)

Claims 20-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Wieschollet et al.*, further in view of CIBA-GEIGY (WO 95/18531; 7/13/95). This rejection is respectfully traversed, particularly in view of the following remarks. As noted above, Claims 21 and 22 have been canceled from the application.

The Examiner asserts that it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the isotridecanol ethoxylate taught by CIBA-

GEIGY to the composition taught by *Wieschollet et al.* to achieve high biological activity with the herbicide formulation claimed in the subject application at low rates of application.

The teachings of *Wieschollet et al.* are discussed above. CIBA-GEIGY (WO 95/18531), like *Wieschollet et al.*, teaches only solid formulations (wetable powders; page 1, 3rd paragraph). The formulations described in CIBA-GEIGY typically comprise inert carrier materials, active ingredient(s), and surface-active compounds. There is no indication that these carrier materials have any other function aside from serving as a carrier in solid formulations.

In addition, *Wieschollet et al.* does not teach a suspension concentrate comprising tridecanol ethoxylate. Even if a person having ordinary skill in the art added tridecanol ethoxylate to the compositions taught by *Wieschollet et al.*, as suggested by the Examiner, the formulation would not have resulted in the suspension concentrate of Applicants' invention, as both *Wieschollet et al.* and CIBA-GEIGY only teach solid formulations such as water-dispersible granules or powders, rather than suspension concentrates.

Furthermore, CIBA-GEIGY teaches the improvement of the biological activity of wettable powder formulations. The biological activity of wettable powder formulations is generally lower when compared to other types of formulations, such as emulsions. Therefore, in wettable powder formulations, surfactants must be compatible with the powder formulations by providing good storage stability of the powder. (CIBA-GEIGY, page 1, 3rd and 4th paragraph)

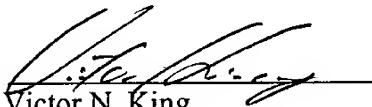
Accordingly, CIBA-GEIGY discloses certain non-ionic surfactants, such as tridecanol ethoxylate, as being useful to improve the biological activity of powder formulations without negative effects on the storage stability of these powder formulations. However, the specific surfactants disclosed in CIBA-GEIGY may not be compatible with, and may not produce similar effects, in the suspension concentrates of Applicants' invention.

It is therefore urged that *Wieschollet et al.*, further in view of CIBA-GEIGY, would not render the presently claimed composition obvious to one of skill in the art, and that the present rejection of the claims under 35 USC §103(a) may thus be properly withdrawn.

Conclusion

In view of the above amendments and remarks, Applicants believe that they have addressed all of Examiner's concerns. Early consideration and allowance of all the pending claims is respectfully requested.

Respectfully submitted,

By: 
Victor N. King
Registration No. P-55,963

Date: March 29, 2004

SPECKMAN LAW GROUP

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